NOBLE (C.P.)

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Endometritis—Considered Clinically.

BY CHARLES P. NOBLE, M.D.

presented by the author

Endometritis—Considered Clinically.[1]

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It is a healthful sign of the times that more attention is being paid in medical societies to the nature and treatment of endometritis. Endometritis is especially important in the category of diseases of women, because, almost without exception, it forms one stage in the progressive inflammatory or septic processes which eventuate in salpingitis, ovaritis and peritonitis. Therefore the curative treatment, or, better, the prevention, of endometritis constitutes a very large part of the prophylaxis of pelvic inflammation in women. If endometritis could be prevented, or could be cured early, before the inflammation has spread to the tubes, it is no exaggeration to say that the number of sick women would be reduced one-third, and the number of those seriously sick would be reduced two-thirds. Surely, this is an object to insure the careful attention and efforts of every one who treats the diseases of women! Modern abdominal surgery offers every facility for the cure of the morbid conditions resulting from pelvic inflammation, and the methods of work have been so perfected that but little progress can be anticipated along the same lines. Progress in the future, I feel sure, lies in the field of preventive medicine, and, happily, the inflammatory diseases of women are clearly preventable.

VARIETIES OF ENDOMETRITIS.

Three varieties of endometritis can be distinguished, clinically: gonorrhœal, septic, and simple.

The status of gonorrhœal and post-

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puerperal septic endometritis is so well defined that I shall make no comments upon them further than to say that in my experience the chronic endometritis which results from gonorrhœa is apt to be suppurative, while that resulting from puerperal sepsis is apt to be hæmorrhagic. Gonorrhœal endometritis, also, is much more difficult to cure, and extends more commonly to both Fallopian tubes. What I have called simple endometritis, for want of a better name, is not so easy to define. There can be no doubt, however, that virgins at times have endometritis, and that endocervicitis is not uncommon among them. It would be easy for me to adduce numerous illustrative cases. What the nature of the infection is in these cases is usually obscure. Undoubtedly it is due at times to the exanthemata. Bacteriological studies in these cases will be of interest.

CHRONIC CONGESTION OF THE UTERUS.

Whatever will cause congestion of the pelvis will bring about turgescence of the vessels of the uterus and endometrium, and induce hypersecretion from the endometrium, constituting uterine leucorrhœa. Among other causes may be mentioned constipation, sluggish portal circulation, feeble heart, pelvic tumors, etc. This condition of uterine congestion simulates endometritis, but is to be strictly differentiated from it, because treatment should be directed, not to the uterus, but to the morbid condition producing pelvic congestion.

It is reasonable to suppose that chronic congestion of the uterus is a predisposing cause of endometritis, and that it acts by lessening the resistance of the endometrium to the attacks of germs present in the vagina. For example, it is well known that marked endometritis is a frequent concomitant of uterine fibroids; and this relation is too constant to be purely accidental.

RELATIONS OF ENDOMETRITIS TO CHRONIC PELVIC INFLAMMATION.

What is most to be feared in endometritis is that the inflammatory process will extend to the uterine appendages and peritonæum. Unquestionably, salpingitis and peritonitis are caused in this way almost without exception. The existence of salpingitis and peritonitis argues the pre-existence of endometritis. The exceptions occur in tubercular, and in post-puerperal cases. The *rule* holds good in the post-puerperal cases, but exceptionally puerperal peritonitis occurs without involvement of the tubes. I am aware that this statement will not meet with universal acceptance, but I have seen and operated upon women having, and having had, puerperal peritonitis in whom the tubes were healthy. The inflammation spread through the uterus to the peritonæum, or spread along the pelvic lymphatics and caused puerperal cellulitis with peritonitis. This fact explains why, in post-puerperal cases, recovery at times takes place after *apparently* serious salpingo-peritonitis. Such cases often get perfectly well, and the explanation is that the tube is not involved. These facts have a decided practical bearing on the questions of treatment in post-puerperal pelvic peritonitis.

Not only is it true that endometri-

tis is the cause of salpingitis and peritonitis, but it is also true that the pelvic congestion induced by these conditions, in turn, tends to aggravate the endometritis and prevent its cure.

SYMPTOMS.

Chronic endometritis is not accompanied usually by marked symptoms, other than those of leucorrhœa or uterine hæmorrhage. I have devoted special attention to this point in the study of cases and have found, when the endometritis is uncomplicated, that pelvic or reflex pains are not complained of. When subinvolution or metritis is present, pelvic discomfort is, at times, a symptom; but, in my experience, the pelvic pain, supposed to be due to endometritis, is almost always due to diseased uterine appendages, and the supposed reflex pains have had a more reasonable explanation as being neuralgia, due to co-existing anæmia. I wish to lay special stress upon the paucity of symptoms of uncomplicated endometritis, because of late the electricians have been teaching very curious doctrines concerning this matter, greatly exaggerating the local and constitutional symptoms of the disease.

FREQUENCY.

Chronic endometritis is a very common disease, but in my experience it is almost always complicated by salpingitis. This great tendency of the disease to spread to the tubes is the reason why it is important to institute curative treatment in the early stages. Some time ago I looked through my case-book and found that four per cent. only were cases of uncomplicated chronic endometritis.

TREATMENT, DILATATION AND CURETTING.

The fact that endometritis is due to infection requires that treatment should have as its object the destruction of the invading germs, and the removal of the results of the infection (the hypertrophied or hyperplastic mucous membrane), or that it assists the efforts of the tissues themselves in accomplishing these objects. I believe that these objects are best secured by dilatation and thorough curetting of the uterus under rigid antisepsis, together with subsequent applications of pure carbolic acid, or Churchill's tincture of iodine, to the endometrium. This line of treatment is the more requisite as the morbid state of the endometrium is the more marked. And in very chronic or well-marked cases, in which there is great thickening of the endometrium, with general involvement of the glands of the corpus or cervix, it may be necessary to repeat the process. In this connection I wish to emphasize the fact that this treatment is advised only for cases of uncomplicated endometritis. In the treatment of cases of uterine congestion, due to pelvic tumors, or to chronic pelvic inflammation, or to various morbid states of the general economy, it can do no good. In the treatment of cases of endometritis, complicated by salpingitis or pelvic peritonitis, this method of treatment is absolutely contra-indicated, because of its futility and because of its liability to induce acute salpingitis and peritonitis. In my judgment, the necessity for careful diagnosis in these cases cannot be too strongly insisted upon, in order that uncomplicated cases of endometritis may be separated from compli-

cated cases. In the one, dilatation and curetting, when properly done, is curative and safe; in the other, the procedure is futile and dangerous.

The grounds on which this method of treatment is advocated for well-marked cases of endometritis are several. First, experience. All who employ this treatment claim good results from it, and hold that it is safe, when properly done, in uncomplicated cases. Second, logic. In chronic endometritis the endometrium is infected and is thickened by inflammation. By using the curette vigorously most of the diseased membrane can be removed, and the occluded glandular ducts be opened, without entailing the formation of cicatricial tissue, owing to the peculiar anatomy of the membrane. And third, antisepsis and drainage are favored. Owing to the multitude of glands in the endometrium, it is probably impossible to disinfect it, hence antiseptic measures should be directed rather toward aiding the tissues (phogocytes) in their battle against the germs than toward active disinfection. Applications of tincture of iodine, or pure carbolic acid, after curetting, probably aid in disinfecting the endometrium, but I think that their utility depends rather upon their mild caustic action. Drainage, which is secured by dilatating the cervix, is a distinct gain, as preventing the retention of the discharges.

Opposition to this method of treatment comes only from two sources. Certain surgeons claim that the treatment causes pus tubes, but they fail to report evidence to support their claims. In order to prove their position cases must be adduced in which the tubes were healthy, but in which salpingitis developed immediately or shortly after dilatation and curetting done under anæsthesia and with rigid asepsis. So far as I know, this has not been done. The point that is lacking is, knowledge of the state of the tubes before curetting. In the absence of this knowledge it is more rational to suppose that salpingitis existed prior to the curetting, and that it was aggravated by it. The electricians also oppose the curette, advocating instead the galvano-cauterization of the endometrium. There is good reason to believe that galvano-cauterization will cure endometritis, but the treatment is tedious and painful, and there is a positive danger of causing atresia of the canal at times, and more frequently of blocking up the mouths of the utricular glands by the cauterizing process.

Dilatation and curetting is an operation which requires the same care to achieve good results which is given to other operations on the uterus. The patient's bowels should be well cleared out, and her skin be put in good condition by the bath. Anæsthesia is indispensable; without it the vagina cannot be well scrubbed, nor can the operation proper be thoroughly done. The vagina should be carefully scrubbed with soap and water, then irrigated and douched with sublimate solution. The cervix is now exposed by means of the perineal retractor, seized with a bullet forceps, gently and moderarely dilated with Goodell's dilators, and then the entire canal of the uterus is thoroughly curetted with the sharp curette. The *débris* is now washed away, an application of pure carbolic acid or of Churchill's tr. iodine made, and the uterine cavity is lightly packed with

gauze. The gauze is removed the following day, and serves to bring away any *débris* which has remained in the uterus. I have not used it to prevent hæmorrhage, for I have had none, nor do I use it to dilate the uterus, for that has been done already.

The patient should remain in bed at least three days, and be confined to her room for a week, being on simple food, and the bowels kept open.

In my hands, cases of uncomplicated endometritis, treated in this way, have been cured, or much improved, and in no case has salpingitis been produced. Such being the case I am unable to comprehend the grounds on which the process is opposed, and am at a loss to understand how those who oppose the curette cure their cases of villous endometritis with metrorrhagia, and their cases of endometritis, with well-marked glandular involvement with purulent discharge.

GENERAL TREATMENT,

both hygiénic and medicinal, is of the highest importance in the cure of endometritis. Each patient should be carefully studied, proper hygienic directions given, and any special indications met by appropriate remedies. Especially should the bowels be kept regular.

VAGINAL MEDICATION,

painting the vault of the vagina with Churchill's tr. iodine, the use of the glycerine tampon, and the hot-water douche is always of value, and in mild cases will effect a cure. This treatment is especially effectual when the endometritis is *kept up* by pelvic congestion due to subinvolution following labor. Undoubtedly it is more effectual for the cure of pelvic congestion than for the cure of endometritis. The advantages are that it is perfectly safe and that it is painless. All cases in which there is a reasonable doubt concerning the existence of salpingitis should be treated by this method until the doubt is cleared up. Tender appendages, tender masses lateral to the uterus, are due at times to ovaritis and pelvic hyperæsthesia and not to salpingitis. Hence, in many cases the practical man will use this treatment until the diagnosis is completely made. It can do no harm, and does great good, especially by improving the pelvic circulation. Its good effect in endometritis can be rationally explained only upon the supposition that by improving the circulation of the uterus it assists the tissues in bringing about an arrest of the inflammatory process.

APPLICATIONS TO THE ENDOMETRIUM WITHOUT DILATATION

should be divided into applications below the internal os and applications to the entire uterine canal. Non-caustic applications to the cervical canal are unobjectionable, and are indicated in mild cases of cervical endometritis. When the Nabothian follicles are markedly involved, the curette should be used. The value of applications to the entire uterine canal, except after the use of the dilator and curette, is very questionable. The procedure is quite painful, and induces, at times, severe uterine colic. When the applicator is used, most of the medicament is squeezed out of the cotton in the cervix, so that but little reaches the body of the uterus. This method of treatment was much used twenty years ago, and the result of the experience of those using it was that it was ineffectual, painful and dangerous. (Thomas, Emmet, Good-

ell.) The accidents (peritonitis) encountered, presumably, were due to the fact that complicated cases were treated. The peritonitis was ascribed to the entrance of fluid into the peritonæum through the Fallopian tubes —sometimes forcibly injected by the syringe—sometimes driven into the tubes by the spasm of the uterus. More probably it was due to traction and manipulation of tubes containing septic material. It seems to me that the evidence upon these points is conclusive, and that applications to the endometrium, through the undilated cervix, should be considered painful and futile. If the uterine syringe is used through the undilated cervix, there is positive danger of forcing the medicament into the tubes. Personally, I find no need for the uterine syringe under any circumstances, and feel that it should be consigned to the medical museum. For making applications to the undilated uterine canal the experience of the past has shown it to be dangerous; and, for making applications to the dilated canal, it is not so useful as the cotton-wrapped applicator. The applicator can be made to come in contact with every point of the canal, and a thorough, and if necessary a prolonged, application of a medicament can be made; whereas, with the syringe the medicine is injected and immediately runs out, and it is largely a matter of chance as to what part of the uterine canal is treated.

THE INTRAUTERINE GAUZE PACK

has become a popular method of treatment of late years. This method is a development of the method of Vulliet of dilating the uterus by packing it with cotton tampons. It has been my practice always to tampon the uterus lightly with gauze after curetting. The gauze is removed the following day and serves to bring away any *débris* which has remained in the uterus. I have had but little experience with the prolonged and repeated use of the gauze pack, and hence speak of it with diffidence. In one case of gonorrhœal endometritis, of three years' standing, and with marked glandular involvement, which I curetted, I removed the gauze on the second day, replaced it, and removed it the second time on the fifth day. Somewhat to my surprise, when the gauze was removed, at least a half ounce of sanious mucus followed it. In this case it did not act as a drain, but as a hindrance to drainage. In the future I shall feel inclined to remove the gauze daily. In office practice, in cases seen after curetting, I have found it very painful to introduce the packing; and it has occurred to me that the Philadelphia uterus is not as tolerant as that of New York, and of Continental Europe.

As my experience grows, I feel more and more convinced that the fewer applications that are made to the endometrium above the internal os, in office practice, the better it is for the patients.

For several weeks after dilatation and curetting, and in cases having a very patulous uterine canal, an exception can be made. But as soon as the effect of the dilatation disappears it is best to recur to vaginal treatment, and if after a reasonable time recovery does not ensue, it is better to repeat the process, rather than to persist with intrauterine applications.

TREATMENT OF COMPLICATED CASES.

In no disease are complications or

extensions of the disease more common, and in the individual case complications must be recognized and the treatment varied to meet the indications. Pelvic congestion, subinvolution, metritis, displacement of the uterus, inflammation of the appendages and peritonitis are the most common complications. The cause of the pelvic congestion must be sought for and appropriate treatment instituted, as diet and laxatives for constipation, exercise for sluggish portal circulation, strychnia and digitalis for a feeble heart, and strychnia and small doses of ergot for atonic pelvic vessels. Subinvolution is best treated by the boroglyceride tampon and the hot douche locally, small doses of ergot, tonics and reconstructives internally, together with graduated exercise out of doors. For metritis the same treatment is indicated, and, in addition, the local abstraction of blood (two to four ounces weekly) and the repair of the cervix, if lacerated. Displacement of the uterus should be corrected. Where the tubes, ovaries and peritonæum are involved the inflammation of these structures is the disease, and the endometritis is the complication.

All operations upon the uterus and intrauterine applications are contraindicated where salpingo-peritonitis exists. Pelvic local treatment should be restricted to vaginal applications. Whether the uterine appendages should be removed depends upon their condition. If adherent and persistingly painful, in spite of treatment, or if the tubes be occluded and retention cysts have formed, or if pus be present, the appendages should be removed. If, after recovery from the operation, the endometritis persists and causes distress, the uterus should be dilated, thoroughly curetted, and cauterized with saturated solution of chloride of zinc. As the function of the uterus is in abeyance it is immaterial if its canal becomes obliterated.

PROPHYLAXIS.

From the nature of the pathogeny of the disease it follows that its prevention depends upon a strict personal hygiene among women, especially strict cleanliness of the genitalia; the early treatment of vaginitis when due to indifferent irritants or to accidental infection with germs, other than the gonococcus; and upon the prevention of gonorrhœa and of sepsis in child-bed.

CONCLUSIONS.

Endometritis is due to infection. All causes of pelvic congestion act as predisposing causes of endometritis, and later tend to aggravate and perpetuate the disease. The rational treatment of endometritis consists in the employment of those agents which lessen pelvic congestion, which assist the tissues in combating the invading germs, and in getting rid of the results of their activity.

In typical cases of uncomplicated endometritis, dilatation and curetting of the uterus, under anæsthesia, and with full antisepsis, with subsequent applications of Churchill's tincture of iodine, or pure carbolic acid, best fulfill the indications. The general condition of each patient should be studied, and each indication should be met by appropriate hygienic or medicinal treatment.

The use of the hot douche, painting the vault of the vagina and the cervix with tincture of iodine, and the use of the glycerine tampon is valu-

able in all cases, and curative in mild cases. This plan of treatment should be employed always so long as there is any suspicion concerning the existence of salpingitis.

Intrauterine applications, by means of the cotton-wrapped applicator, are valuable and safe when the uterine canal is patulous, but are painful and of little value if that canal is constricted. Intrauterine medication should follow curetting, not precede it; and because of the pain it causes it should be employed only when strictly necessary.

Careful, thorough diagnosis is very necessary. All complications should receive appropriate treatment. The most common complication—really, an extension of the disease—is inflammation of the uterine appendages. Where this exists, it is of such gravity that it should be considered the disease, and the endometritis a complication. During the existence of tubo-ovarian inflammation operations upon the uterus and intrauterine medication are contraindicated. Should the uterine appendages be removed, and the endometritis persist, it should be treated by curetting and cauterization.

DISCUSSION.

DR. E. E. MONTGOMERY:

Dr. Noble has given us a very clear and able presentation of the subject of endometritis. The importance of this disease cannot be overestimated when we consider the probability of the extension of the disease from the uterine mucosa to that of the tubes and thence to the peritonæum and ovaries, and the serious maiming of the individual, not only in the function of these organs, but in the general health during subsequent years. The almost absolute impossibility of restoring the function also indicates the importance of early treatment in such diseased conditions.

In speaking of the induction of sepsis and extension to the uterine mucosa, with subsequent involvement of the peritonæum, I understood the author to say that this takes place, not infrequently, independently of the tube, as is shown by the fact that operation discloses the tube to be perfectly healthy. An experience of my own a year ago has led me to believe that the tube may be the carrier of infection without itself being infected, that a patulous tube may be the canal through which the disease is carried to the peritonæum and ovary, without itself undergoing inflammatory action. A young woman was confined for the first time. The labor was easy, but three days later there was a considerable elevation of temperature. At the end of a week I was called to see the patient, in a neighboring city, to determine whether there was any involvement of the peritoneal cavity necessitating operation. Careful examination under an anæsthetic failed to disclose any evidence of involvement of the peritonæum. I could not determine that the tubes and ovaries were affected. The uterus was dilated by the introduction of the finger, and there was at once an unpleasant odor perceptible. This had not been recognized before. Intrauterine injections had been employed from the time of the development of the elevation of temperature. The uterine cavity was curetted with the finger and a blunt curette, washed out with an antiseptic solution and then packed with a twist of iodoform gauze. This was permitted to remain forty-eight hours. The temperature became normal and remained so for fifty-four hours. After this the temperature ranged between 99° and 101°, with rather frequent pulse for nearly three weeks, at the end of which time it again reached 106°. I saw her again at this time, when careful examination still failed to disclose any signs of involvement of the peritonæum. Hoping that the condition might be a temporary one, I suggested a plan of treatment with the idea that, if not successful, exploratory incision should be made. In less than forty-eight hours I was again summoned on account of recurring chills and high temperature. The abdomen was opened. There was nothing in the walls of the uterus that indicated inflammation. The tubes were healthy. Projecting from the orifice of the left tube was a small piece of lymph, with a similar portion on the surface of the left

ovary. The ovaries and tubes were removed. The left was four times its natural size and contained a teaspoonful of greenish-yellow pus. The temperature at once subsided and the patient very promptly recovered.

The rapid extension of the disease from the tubes to the pelvic structures indicates the importance of rendering the uterine canal sterile as early as possible. I do not believe that there is any better plan in acute sepsis following delivery than to thoroughly dilate the canal and curette the cavity, washing it out to render it sterile and drain by the introduction of a twist of iodoform gauze. This insures drainage, and there is a likelihood of relief of the trouble without further extension. I believe that the majority of cases of endometritis, and consequently of salpingitis, are the result of regurgitation of fluid into the tube on account of obstruction to its passage through the cervical canal. In these cases we have desquamation of the epithelium with swelling of the mucous membrane. The narrowest portion of the canal is at the internal os, and thus we have here constriction due to inflammatory conditions, and the discharge which is increased in quantity makes its exit with difficulty. The uterus undergoes contraction in order to force out the fluid, and if the cervical opening is not readily distended, the fluid regurgitates into the tube. If such a patient is subjected to examination by a careless physician or one who uses the sound, infectious material may be carried into the uterus, and quickly extend to the tubes, with the development of serious trouble. These cases are greatly benefited by dilatation, moderate curetting, drainage and rest. I care not whether the drainage be accomplished by gauze or by the use of a stem with grooves upon its side, in order that the discharge may have a ready exit. I do not believe that dilatation is necessarily contraindicated, even when salpingitis exists, that is, where inflammation of the mucous membrane of the tubes is present. If we are able to secure drainage from the uterus and prevent further regurgitation and secure emptying of the tubes, I am sure that many cases will be relieved and the disease cured, where if this is neglected the patient will necessarily be subjected to an operative procedure of a sacrificial character.

In performing operations, every aseptic precaution should be observed. This is as important as in operations upon the peritoneal cavity. The vagina must not only be irrigated but thoroughly scrubbed, and for this purpose there is nothing better than an application of green soap with a five to ten per cent. solution of creolin. The mucous membrane should be thoroughly scrubbed and washed before we proceed to disturb the uterus. The advantage of creolin over the bichloride is that it does not constrict the tissues. It leaves the parts in a more relaxed condition and less dry than after the application of the sublimate solution. Before proceeding to dilatation the cavity of the cervix should be curetted and disinfected. In the main I fully agree with Dr. Noble in regard to the importance of dilatation and curetting, and particularly of drainage and rest. Many of these cases can be treated in this way and more accomplished in two or three weeks than by the ordinary methods in as many months.

DR. JOSEPH PRICE:

You have all repeatedly heard my views upon this subject, and I scarcely feel like entering this discussion. I sometimes think that these methods of treatment are very much like locking the stable after the horse has been stolen. A woman returns from her wedding trip with advanced mischief, and I scarcely think that curetting, iodine and carbolic acid, single or mixed, will save her from the mischief that follows. The discussion seems to fortify this statement. I will refer only to two cases. In a recent discussion in the New York Obstetrical Society a gentleman spoke of a case of endometritis which he had curetted, drained and applied solutions to and sent her home well. In the course of two months she returns with two ovarian abscesses and pus tubes. These are removed and she gets well. Dr. Montgomery cites a case in which he etherizes, examines carefully and fails to find ovarian or tubal disease. He directed intrauterine treatment, and ovarian abscess and disease of the tubes follow, for which he does an exploratory incision. In this case it would be interesting to know the causal relation that the primary trouble bears to the tubal and ovarian disease. Again, it would be interesting to know the causal relation of the dilatation, intrauterine treatment and traumatism to the abscess and the lymph he found in his exploratory

section. These are questions worth considering in this discussion and in the management of similar cases. Our knowledge of this subject is accurate, and men should not grope in darkness and guess at what is best, nor should they resort to exploratory methods blindly.

DR. E. E. MONTGOMERY:

Dr. Price has evidently misunderstood my remarks. This woman had had a child a week before I saw her. The cavity of the uterus was distended with infectious material, which was scraped away.

DR. J. PRICE:

I did not mean to criticise Dr. Montgomery's case, except as a type of the vast number of similar cases on record. Gynæcologists of the present day are coming back to the scientist's position and accepting facts only. When we hear men talking about endometritis in all its varieties, it is natural to ask them if they can demonstrate such conditions with the uterus in their hands. I know very well that many years ago the condition of affairs that we find so commonly in the female pelvis did not exist to the same degree as at present. Pus tubes and ovarian abscesses were not by ninety per cent. as common as they are now. There is no question that the multiplication of railroads, the artificial methods of living, conventionalities of society and the vice that prevails in great cities predisposes to these troubles. We know that gonorrhœa is exceedingly common, and we know the causal relation that it bears to pelvic inflammatory trouble. Again, I know that where I find only one railroad in a town, I find but few cases of advanced mischief. Where we have no railroad in a small city there is almost a total absence of such troubles. I know this, not from one year's experience, but from ten years' study and most careful observation. I have just returned from a small city with a railroad only for a few years, and I took pains to ascertain the presence or absence of pelvic inflammatory trouble. I was told by four respectable physicians that such a thing did not exist. I went from this town to a railroad and manufacturing centre, and examined some ten patients and found advanced mischief—everything in the pelvis worthless so far as physiological function was concerned. I allude to these cases for two purposes. I am not quite willing to say that they are wholly due to vice and the advance of civilization, or that they are wholly due to gynæcology, but they are due to both. Six of the ten cases had been treated by six of the prominent gynæcologists of America. Some had the cervix dilated and the uterus curetted. Another had had the cervix closed. All of these men have criticised my position on this subject. They have alluded to the fact that a paper has been read upon the subject by Dr. Price, saying that such methods have been criticised, and that certain troubles have been said to follow the treatment, and then have remarked that if the cases are properly selected and proper antiseptic precautions adopted, such mischief does not follow. These are their criticisms on my observations, but the cases that I examined four days ago came from these very men. I have been on the alert, and have been making most careful notes and studies, and have had the assistance of not a few men of rare judgment and experience.

Take these specimens shown by Dr. Cushing with malignant disease, extending to the internal os, no doubt with disease of the tubes and ovaries, and yet no evidence of endometritis. I have removed fifty-four uteri for malignant disease, and with many of these have been associated pus tubes and suppurating ovaries, but in not a single case have I found endometritis that I could not wipe away with a piece of cotton or gauze. I have removed eighty-two huge fibroids, another condition accountable for the endometritis so often found. In about every case I have incised the uterus with the specific purpose of studying this subject. It is exceptional that I find that condition of affairs so much preached about and to cure which so much is done. Again, the men who talk the most about this subject, I venture to say, are the men who have incised the fewest uteri and have made the fewest microscopical observations. They talk loftily about scientific work and microscopical investigations, but some of them have never even extirpated a uterus,—had none to examine, none to take sections from. I do not mean to say that endometritis does not exist. I know better. I know that it begins as a catarrhal trouble at the vulva or vagina and extends to the cervix, to the endometrium, to the tube and ovary, and becomes a peritonitis, and

this saves the woman by sealing up everything. The mischief, however, has been done before the treatment is commenced, and in many cases the treatment is responsible when done for fancied disease. I enter this discussion purely to call a halt in all this tinkering. I do too many sections to save lives, and I find too much mischief to keep silent on a subject of this importance. Teachers are continually saying, with my paper in view, that the cases have been improperly selected or improperly treated. The very class of cases that I am talking about are coming from these men. The Philadelphia uterus does not differ from the New York or German uterus. The author of the paper this evening takes precisely the opposite position from what is taken in New York. In the presence of tubal or ovarian disease, if he recognized mischief above the uterus, he would not dilate, or drain, or make local applications. I agree with him wholly in this. In New York the cavity of the uterus seems to be considered venomous. Huge pus tubes may exist, but the condition of the cavity of the uterus must be relieved before the tubes are removed. It matters not what is beyond the uterus—it must be prepared, or these germs will crawl up and kill the patient from sepsis.

You will pardon me if I allude to an old experience. I presume that I treated hundreds of women at the Midnight Mission. I never dilated once or curetted once, notwithstanding they were courtesans and chronic inebriates, some of them on the town for ten years. I never made any local applications, but put them on good food and iron. They were kept clean. Some may have had the vaginal douche. Some had not conceived for three to five years. Some of them—say, two per cent.—had sections for the removal of tubes and ovaries larger than the uterus. Of this group twenty per cent. conceived within six months after leaving the institution. This was the experience that put me on my guard and made me give the subject that consideration that induced me to take the position that I now hold. The last author on this subject—a Frenchman—has distinctly said that there is no evidence of endometritis in these cases, although the tubal disease is present.

The author to-night has alluded to the simple and the chronic forms. It will require a careful analysis of cases and study of specimens to make such a classification. Aveling has written of nidation and denidation. If you examine one hundred uteri, how many will show nidation, how many denidation, and how many endometritis? You will find that they are different stages of the same retrograde change.

Puerperal peritonitis. I have watched a patient with puerperal peritonitis for three to five days, purging and using large intra-uterine douches. The peritonitis has continued, and I have opened the abdomen and found a pint of muddy fluid and some adhesions and lymph of recent formation. I have found a black and angry tube, a tube so gangrenous that it could be peeled out of the crest of the broad ligament.

This subject is too great to enter into fully and completely, but I have expressed myself plainly just as I feel and just as I act. I do feel that we have too much gynæcological tinkering, too many gynæcological operations and too many gynæcologists. The older gynæcologists are not doing so much mischief because they are men of much experience and good judgment. They were all-around practitioners and general surgeons before practising gynæcology. It is the young men who graduate as gynæcologists who are doing the mischief, who have not had a varied experience in medicine, but want to do an abdominal section before even vaccinating a baby.

DR. NOBLE:

I wrote a note to Dr. Price, in view of this discussion, asking him to tell us how he would treat a case of fungous endometritis with resulting hæmorrhages, and particularly a case of endometritis following abortion, where more or less of the ovum, or where a portion of the decidua, is retained. I should like him to tell us how he cures these cases without the use of a curette, or the finger used as a curette in the cases of incomplete abortion.

DR. J. PRICE:

As a rule, the uterus empties itself. My experience in abortions is pretty much as that in midwifery. I am called to deliver a placenta, and when I arrive find it in the vagina. I have only exceptionally found the product of conception retained. Where such was the case I have removed it with my finger and washed out the uterus. As a rule,

I have been able to do this with my finger. I draw the patient well towards me, and without an anæsthetic use the finger, which I consider the best curette in these cases. Cases of abortion, with moderate irregular bleeding, I treated on general principles, building them up and, perhaps, giving a mixture of ergot if the trouble has gone beyond five or six months.

DR. JOSEPH HOFFMANN:

I see here and there over the room a scalp peeping out through the hair, and pretty soon this condition will be attributed to some form of coccus. This would be as logical as to ascribe all cases of endometritis to infection. Suppose that these cases of endometritis are due to infection, how shall we get rid of the dirt in the vagina? We know that certain experimentalists resort to oxalic acid and permanganate of potassium, but it has been discovered that even this does not kill all the germs. If they are infectious, what can soap do? If oxalic acid and permanganate of potassium does not reach them, what will simple scrubbing do? If these germs are found all over, how is it that every woman does not have endometritis? This is illogical, for nothing is more certain than that many cases of endometritis are due to nothing else than mechanical conditions or physiological perversion. Dr. Noble criticises the gynæcologists who use electricity, thereby cauterizing the uterus, and then Dr. Noble uses chloride of zinc. If there is any cautery more powerful than chloride of zinc, I do not know it. It is a most irritant caustic, is dangerous, and you cannot control it. Dr. Skene remarks that to stop the secretion does not cure the disease, and wants to know how far the caustics may go to produce cicatrization in the uterus, as they do outside. We all know that by caustics well applied we might entirely stop the secretion from the eye, but we should not have left a perfectly healthy membrane. How much more will strong caustics do this, if nitrate of silver and alum will? As to carbolic acid, we know that this agent is capable of producing necrosis and slough by external application, so why its intrauterine application is regarded with so much complacency is puzzling.

A word in regard to dilatation. It is said that we should dilate to permit a free flow of fluid. How many women are there who menstruate freely through an os no larger than the end of my pencil? There is abundant hæmorrhage, which escapes readily, which shows that operation is unnecessary. If the cocci are the cause of the trouble, will there not be increased danger from the lacerations caused by the dilatation?

Dr. Noble asks for proofs that dilatation causes subsequent trouble. I have watched a series of cases by certain operators, one of whom claims to be able to feel dilated veins in the broad ligament. If this is possible, he should be able to feel an enlarged tube and ovary. Now, when these same men have begun with the perinæum and cervix, going on to dilatation and curetting, and have ended with abdominal section for pus tubes, is it not time either to stop claims for ultra-exact diagnosis or to confess that intrauterine treatment may do serious damage when we least expect it so to do? Such are the facts. Though they may be ignored, passing them over does not reply to them or negative them.

DR. M. PRICE:

I rise to ask if it is admissible to report cases and point out the men who sit in this Society who did the work? If it is, I have eight or ten cases belonging to this Society and I should be glad to report them, men and all. With some of the cases I have had to persuade the patients that a criminal prosecution would end in failure and involve them in great expense, in order to save my brother Society men. I have a number of these cases that have been dilated and curetted by men in our Society. Dr. Noble asks for proof. I can give it to him if it is admissible. Piles of it, following the woman straight from the doctor's office to her bed in a distant city, and her life at death's door when I visited her, and a section necessary. The wonderful manipulative skill and diagnostic powers of this man could not detect the first symptom of disease, and he said to the woman in a most emphatic way, "All you need is dilatation and intrauterine applications and you will have a baby inside of eighteen months." That is one case only, but I have something short of a dozen of them.

DR. CHARLES P. NOBLE:

I am glad that the subject has elicited such full discussion. I wish to call attention especially to peritonitis after labor without involvement of the tubes. Last year I

reported four cases in which there was peritonitis, and in three of which abdominal section was done, and in which there was found abscess in the broad ligament, the tubes being free and healthy. The fourth case was not conclusive. There was an abscess following abortion, which I opened in the loin. There was no fixation from the vagina. The only rational explanation was the breaking down of a lumbar gland. In three cases the abdomen was opened and the abscesses were evacuated by a second incision above Poupart's ligament. I can also refer to the post-mortem work at the Philadelphia Hospital, done by Dr. Parish, in which there was a large number of cases of peritonitis without involvement of the tubes. I do not think that this is the rule even in puerperal cases. But this fact is the explanation of why in puerperal peritonitis the whole trouble often clears up and the patient gets entirely well without operation and subsequently bears children.

I am sorry that the gentlemen who took issue with the line of treatment for endometritis laid down in the paper did not tell us what they do for the cure of their cases. So far as I can make out, they allow their patients to run on until they get pus tubes and then remove them. We are, therefore, to conclude that the result of their plan of treatment is to multiply the number of sections.

With regard to the relative frequency of diseased appendages in cities and rural communities, there can be no question that greater frequency of these conditions in cities is due to the prevalence of gonorrhœa and puerperal sepsis. I do not think that this is new. Bernutz, in 1840–50, found these diseases prevalent in Paris. He established the whole pathology of pelvic inflammation before anyone thought of taking out the diseased tubes. If we had had careful investigations made ten centuries ago in large cities, I have no doubt the same diseases would have been found.

Dr. Price states that he has never seen the evidences of endometritis. That is a strictly pathological question to be settled by the microscope. Pathologists tell us that they find this disease, and the question is whether you will take the testimony of the naked eye or that of the microscope. I know, from my experience with the curette, that there is a marked difference in the endometrium in different cases. Frequently you will find nothing that can be removed, while at other times the softened, thickened endometrium literally comes away by drachms.

The contrast in these cases is so marked as to be convincing to anyone whose mind is constructed on ordinary principles.

I have taken out pus tubes in cases that have had dilatation, curetting or the perinæum sewed up, but that does not prove that the condition of the tube had anything to do with the operation. There was no proof that the salpingitis was not present before operation.

In regard to the use of caustics, I stated that I used chloride of zinc only in cases where the appendages had been removed and the function of the organ was gone. I do not advocate its use in functionally active uteri, nor would I use it in such cases. With reference to cicatrization from tincture of iodine or carbolic acid, Dr. Hoffmann seems to have an unusual experience in the use of these drugs. I have never seen sloughing follow the use of either of these agents, nor do I expect to have cicatrization result. The supposed danger of the destruction of the glands of the cervix and uterus is purely imaginary. In the paper I clearly pointed out that there was a distinction to be drawn between a uterine leucorrhœa from congestion and an endometritis where there is a positive lesion in the uterus.